

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No. : 10/782,741                      Confirmation No. : 1664  
Applicant : Sercel, et al.  
Filed : February 19, 2004  
TC/A.U. : 1725  
Examiner : Elve  
Docket No. : JPSA001  
Customer No. : 32047

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Applicant has reviewed the Office Action mailed on August 21, 2007 and requests review of the final rejection in the above-identified application. No amendments are being filed with this Request. This Request is being filed with a Notice of Appeal.

The applicant herewith petitions the Director of the United States Patent and Trademark Office for a two (2) month extension of time from November 21, 2007 to January 21, 2008. Submitted herewith is a Credit Card Payment Form authorizing a credit card charge of \$230.00 to cover the cost of the extension. To the extent that any additional extension of time is required, applicant hereby petitions for such extension and authorizes any extension fees to be charged to Deposit Account 50-2121.

### **REMARKS**

The pre-appeal brief review is requested for the reasons stated below.

#### **I. The Office clearly erred by failing to ascertain the differences between the claimed invention and the prior art**

The Office Action dated August 21, 2007 (“Office Action”) continues to reject the pending claims under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,752,922 to *MacAnally, et al.* (“MacAnally”) in view of U.S. Patent No. 6,266,302 to *Yamanaka, et al.* (“Yamanaka”). In making these rejections, the Office clearly erred by failing to conduct a key factual inquiry enumerated in *Graham v. John Deere Co.* and reiterated in *KSR International Co. v. Teleflex Inc.* – ascertaining the differences between the claimed invention and the prior art. The Office Action appears to presuppose that certain claimed limitations are disclosed in the cited references without providing any explanation of where or how those limitations are disclosed. Applicants have pointed out these factual deficiencies in the previous replies dated January 18, 2006, January 5, 2007 and May 25, 2007.

In particular, the Office Action fails to identify any disclosure in MacAnally or Yamanaka of the use of an astigmatic focal beam spot to ablate and cut a substrate (see Reply dated January 18, 2006, p. 8; Reply dated January 5, 2007, p. 11; Reply dated May 25, 2007, p. 9). More specifically, the Office Action also fails to explain how MacAnally or Yamanaka disclose “moving said substrate in a cutting direction along said length of said astigmatic focal beam spot such that said astigmatic focal beam spot causes ablation of said substrate to obtain at least a partial cut in said substrate.” (see Reply dated January 5, 2007, p. 11; Reply dated May 25, 2007, p. 9).

The Office Action fails to explain how MacAnally or Yamanaka disclose the claimed characteristics of the astigmatic focal beam spot (see Reply dated January 5, 2007, p. 11; Reply dated May 25, 2007, p. 10). The Office Action also fails to address the claimed limitations of “determining a target energy density for said substrate” and “wherein said astigmatic focal beam spot is modified to provide an energy density on said substrate at the target energy density for said substrate,” which were added by the most recent amendment (see Reply dated May 25, 2007, p. 10). Furthermore, the Office Action fails to address numerous limitations recited in

dependent claims, namely, varying convergence recited in claim 7, symmetrically cropping low intensity edges recited in claim 9, and creating a plurality of separated astigmatic beamlets recited in claim 19 (see Reply dated January 5, 2007, p. 13; Reply dated May 25, 2007, p. 10).

In fact, the Office Action, when explaining the combination of MacAnally and Yamanaka, does not even mention many of these limitations identified above. Thus, this failure to ascertain the differences between the claimed invention and the prior art, as required for any analysis under 35 U.S.C. 103, amounts to a clear factual deficiency and an improper rejection.

## **II. The Office clearly erred by failing to provide clear articulation of the reasons why the claimed invention would have been obvious**

In rejecting the claims under 35 U.S.C. 103(a), the Office Action dated August 21, 2007 combines a number of different references, namely, U.S. Patent No. 4,752,922 to *MacAnally, et al.* (“MacAnally”), U.S. Patent No. 6,266,302 to *Yamanaka, et al.* (“Yamanaka”), U.S. Patent No. 6,580,054 to *Liu, et al.* (“Liu”), U.S. Patent No. 5,181,224 to *Snyder* (“Snyder”), and U.S. Patent No. 6,881,529 to *Iwasaki* (“Iwasaki”). The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. MPEP 2142, citing *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, \_\_\_, 82 USPQ2d 1385, 1396 (2007). In combining the references under 35 U.S.C. 103(a), the Office clearly erred by failing to provide a clear articulation of the reasons why the claimed invention would have been obvious based on the combination.

In combining MacAnally and Yamanaka, the Office Action states “[i]t would have been obvious to one of ordinary skill in the art at the time of the invention to use convergence as taught by Yamanaka in the MacAnally et al. process because it fully tailors the beam and hence optimizes the cutting area.” The Office Action never explains, however, why the other missing limitations would have been obvious, namely, the ablation, the moving of the substrate, the characteristics of the beam spot, and the determining of a target energy density. Also, the Office Action has not established that either MacAnally or Yamanaka disclose or suggest a cutting area that is cut by an astigmatic beam spot. As such, the combination of these references cannot optimize something that is not disclosed or suggested by the references.

In combining Liu with MacAnally and Yamanaka, the Office Action states “because these are merely variations of laser types and the recording of data and parameters, in order to

characterize the process operation.” To the extent that applicants can understand this rationale, the proposed combination of a sapphire scribing system (Liu) with an optical disk reading/writing system (MacAnally or Yamanaka) would be much more than a mere variation of laser types. The Office Action fails to address how or why a sapphire substrate taught by Liu would be used in an optical disk reading/writing system taught by MacAnally or Yamanaka (see Reply dated January 18, 2006, p. 9).

In combining Snyder with MacAnally and Yamanaka, the Office Action states “because these are merely apparatus variants.” The Office Action does not explain what “apparatus variants” are and how this renders the claimed method obvious. Thus, this conclusory statement does not amount to a clear articulation of reasons why the claimed invention would have been obvious.

In combining Iwasaki with MacAnally and Yamanaka, the Office Action states “because it is a variation of the materials.” The Office Action does not provide any articulation of why the “variation of the materials” would have been obvious. The Office Action relies on circular logic to conclude that varying materials would have been obvious because they are a variation of materials. Such reasoning does not amount to a clear articulation of reasons why the claimed invention would have been obvious.

Accordingly, the failure to provide a clear articulation of reasons why the claimed invention would have been obvious based on the combination of references amounts to a clear legal deficiency and an improper rejection

### Conclusion

Applicant respectfully submits that the claims are in condition for allowance and requests notification to that effect. The examiner is invited to telephone the undersigned, applicant’s attorney of record, to facilitate advancement of the present application.

Please apply any charges not covered, or any credits, to Deposit Account 50-2121 (Reference Number JPSA001).

Respectfully submitted,

GROSSMAN, TUCKER, PERREAULT &  
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Date: January 4, 2008

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